Vegetation MOU Working Group
July 23, 2002

Summary of meeting

1. Progress on Mapping Rules crosswalk - Todd Keeler-Wolf

The mapping rules crosswalk effort depends in part on the use of the National Vegetation Classification System (NVCS). The group recognized that NVCS had not yet been formally adopted by FGDC, however. Ralph and Hazel offered to draft up a letter for Marc to submit for Mary Nichols signature, directed to Alison Hill, Chair of the FGDC vegetation subcommittee (with cc: to NVCS staff at NatureServe). The letter would cover the following points:

1. California is coordinating vegetation mapping and classification among state and federal agencies
2. This effort is moving in the direction of using NVCS, but we need to respect FGDC standards.
3. There is some uncertainty about whether FGDC will be adopting NVCS or not. We would like some clarification from FGDC on this.
4. Will FGDC adopt NVCS?
5. Who is the best person at FGDC to coordinate our California efforts with?

Todd presented a handout that Karen Converse has started, describing what information will be provided as part of the Mapping Rules Crosswalk table. Three tables will be created, showing the linkages from MCV to CalVeg and WHR (Table 1), from CalVeg to MCV and WHR (Table 2), and from WHR to MCV and CalVeg (Table 3).

The group recommended that the attributes in Table 1 dealing with field-based classification (NVCS code, MCV name and field based rules, associated CalVeg and WHR analog rules) be cross-walked first before the MCV mapping unit rule attribute. After doing the first cross-walk, Karen should evaluate what holes or differences exist, which has its own attribute column. The MCV mapping unit rules can then be crosswalked based on that assessment.

The group also recommended adding other attributes to Table 1: geographic province information, NVCS physiognomic information (class and subclass level), and recommendations for treating differences between classification systems. The geographic province info will be useful to account for regional variations and the NVCS physiognomic information provides organization for grouping floristics, as well as rules for fitting "square pegs into round holes".

Karen has already completed entering the MCV classification rules in Table 1. She has found language differences and needs to standardize that language.

2. Map Unit Design

The Map Unit Design Attributes table was modified slightly, based on discussions about disturbance index (see below). Be sure to replace your copy with the new attachment.

Marc asked if the map unit design table was ready for formal review. The group recommended waiting until Karen Converse's work (above) was completed, as well as more agreement on the following topics:

a. Shrub Structural Diversity – Monica Parisi

Monica was unable to attend. She planned to discuss what map information related to shrub structure (density, size class, etc.) was needed by the Interagency Wildlife Task Group. She will present this information at our next meeting.

b. Disturbance Intensity and Type – Todd Keeler-Wolf

Todd presented a list of disturbance types, with separate intensity ratings for each type. Disturbance information would be limited to observations possible via remote sensing:

➢ Roads and trails: Intensity is rated by road surface (dirt, paved) and roadedness (density of roads)
➢ Logging: Intensity based on estimated reduction of overstory cover and degree of associated disturbance (yarding, landings, etc.). The group recommended adding a measure of the estimated or actual timeframe since disturbance
➢ Grazing: Intensity is rated by visible effects, such as cattle trails.
➢ OHV activity: Intensity is rated by visible recreational trails and non-contour trails and tracks
➢ Invasive exotics: Intensity is rated by average cover by weeds or listed noxious weeds. Intensity level is higher with higher coverage by weeds
➢ Riparian modification: Intensity is rated by dams, levees, rip-rap and other flood control structures. Intensity also characterized in terms of impact on full or partial reaches and the degree of impact on vegetation.
➢ Development: Intensity is rated by acreage affected by housing, other structures, and intervening roads. Information should also reflect whether the development is within or adjacent to the vegetation polygons, depending on the type of vegetation
➢ Fire: this was not on Todd's initial list, but the group added. Intensity measures are similar to those for logging

The group recommended that Todd develop quantifiable categories for each disturbance type. Marc suggested that ancillary data sets can help identify disturbance and he will suggest data sources to use.

The group recommended that this disturbance index be an optional, not core, attribute for map units.

c. Map Unit Internal Diversity – Todd Keeler-Wolf

Todd presented a proposal for describing map unit internal diversity. This becomes an issue when individual map units contain more than one interdigitated vegetation type. He recognized three reasons why this might happen, with recommendations for each situation:

- ➢ The map unit is already at the Minimum Mapping Unit size
    - o List the type that covers most of the unit
    - o List other types as inclusions and whether they have been field verified
- ➢ The included types are too difficult to clearly delineate (such as subtle differences in intermixed tanoak associations)
    - o Develop mapping unit aggregations based on the combination of lifeform and ecological setting (e.g. xeric-convex-sparse herbaceous –temporarily flooded- montane meadow). Each of these should have a list of vegetation alliances associated with them
- ➢ The inclusions are too small and scattered with the unit (such as isolated forest fragments following wildfire or small copses of subalpine conifers in an alpine matrix)
    - o Define a minimum stand size for tree-dominated types. Don't let inclusions dominate the map unit.

My notes are a bit fuzzy here, but there was some discussion about using standard USFS categories, such as homogenous, like types, and dissimilar types.

3. Land Use/Land Cover Integration

Hazel brought in an example of a joint land cover/land use classification developed in Minnesota (Minnesota Land Cover Classification System). Mark Rosenberg brought in a proposal that recommends using simplified categories for open water, barren lands, urban/developed areas, and agricultural lands. His proposal shows crosswalks between these broader categories and WHR, Anderson, DWR land use categories, and USGS's modified Anderson. Brian brought in a proposal that offers a way to combine Urban land uses and agricultural land uses into one attribute (i.e. Urban, Urban/Ag, Urban Interface, Urban Interface/Ag, Rural Intermix, Rural Intermix/Ag, Sparsely Populated,

Sparsely Populated/Ag). It is based on a set of breakpoints in classifying housing densities and a modification of DOC's Farmland Mapping categories

The discussion on this topic is not making substantial headway. At one of our previous meetings, we decided that we would all try to map miscellaneous land cover types using the following steps:

1. First map all map units to a natural vegetation classification system.
2. For areas that cannot be classified by natural vegetation, these units should be mapped to a land cover type such as water, barren, grass, shrubs, or trees. We don't want to mix land use categories (agriculture, residential, etc) in this data set.

We need to revisit this decision and see if we still agree with it.

Ralph and Molly volunteered to develop a more refined Anderson classification to account for differences in housing density and urban/agric land mixes, as well as a key for classifying map units by this refined system.

They also volunteered to evaluate the pros and cons of using either a combined land use/land cover system (such as Minnesota's) or two separate classification systems.

4. Miscellaneous Issues

➢ Get NPS to sign MOU – Marc
➢ Coordinate with CalFed funding of vegetation mapping, both Watershed Program and Ecosystem Restoration – brief them on our effort, find out what they are doing and what they need for vegetation data – Marc